

**GOVERNMENT/INDUSTRY AERONAUTICAL CHARTING FORUM**  
**Instrument Procedures Group**  
**May 1, 2007**  
**HISTORY RECORD**

**FAA Control # 07-01-276**

**Subject:** RNAV Hold-in-Lieu (HIL) Prior to the Intermediate Fix

**Background/Discussion:** TERPS criteria require that course reversals be predicated on the intermediate fix. In the case of RNAV procedures this could create terminal routing limitations at some mountainous airports

**Recommendations:** TERPS criteria should be amended to permit RNAV HIL course reversals at an IAF prior to the IF, but only where intermediate segment length won't permit an HIL at the IF that clears terrain. Otherwise, any RNAV HIL should be anchored at the IF.

**Comments:** This recommendation affects policy set forth in 8260.19C, "Flight Procedures and Airspace, and 8260.3B, "TERPS."

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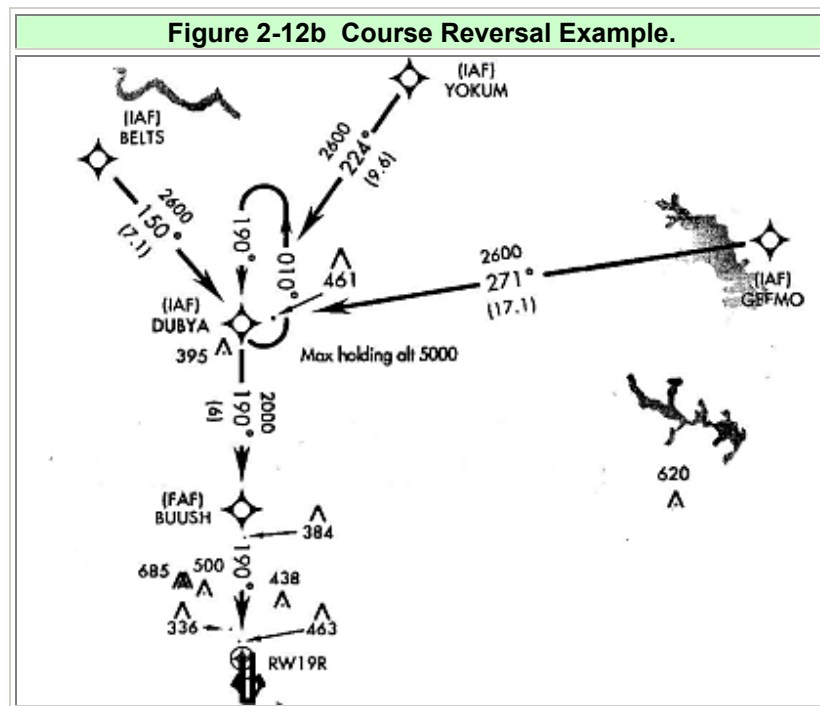
**Date:** April 5, 2007

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**MEETING 07-01:** New Issue presented by Rich Boll, NBAA, regarding course reversal maneuvers. TERPS criteria require that course reversals be predicated on the intermediate fix. In the case of RNAV procedures this could create terminal routing limitations at some mountainous airports. NBAA recommends that TERPS criteria be amended to permit RNAV HIL course reversals at an IAF prior to the IF, but only where intermediate segment length won't permit an HIL at the IF that clears terrain. Otherwise, any RNAV HIL should be anchored at the IF. Tom Schneider, AFS-420, responded that this issue is addressed in a change to Order 8260.54. Brad Rush, AJW-321, asked why NBAA was requesting a HIL pattern when an arrival holding pattern would serve the same purpose without making the course reversal mandatory (see Order 8260.19, paragraph 857c(4)). Tom Schneider, AFS-420, recommended that NBAA review the draft change to Order 8260.54 (see below) and the current guidance in Order 8260.19 for adequacy.

***Draft Guidance for Order 8260.54:***

**2.8.6 b. Course Reversal.** *Ideally, establish the minimum holding altitude as the minimum IF fix altitude. See figure 2-12b. In any case, the published holding altitude must result in a suitable descent gradient in the intermediate segment: optimum is 150 ft/NM (2.47%, 1.41°); **maximum** is 318 ft/NM (5.23%, 3.0°).*



**ACTION:** NBAA.

**MEETING 07-02:** Tom Schneider, AFS-420, briefed that Order 8260.54 will not eliminate access to IAPs from airways and suggested that an arrival holding pattern or “Proc NA” may be appropriate in cases where the turn from the airway is greater than 120 degrees. Brad Rush, AJW-321, briefed that a HIL (or any other course reversal maneuver) is not applicable if the IAF is on an airway. The NFPO leaves it up to the controlling ATC facility to determine whether access is desired from the airway, if so, an arrival holding pattern is warranted. Offset holding up to 90 degrees from the intermediate course is acceptable. Tom recommended the issue be closed and the group concurred. [Item Closed](#).